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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,028	03/13/2001	Akihiro Kajimura	1247-0454P	8832
2292	7590	03/03/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			CORSARO, NICK	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/804,028

Applicant(s)

KAJIMURA, AKIHIRO

Examiner

Nick Corsaro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because the abstract is too long. Correction is required. See MPEP § 608.01(b).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-10, 12-15, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (5,960,361) in view of Agrawal et al. (5,722,051).

Consider claims 1, and 8, Chen discloses a method of automatically controlling a transmission power of a wireless communication apparatus in order to suppress consumed transmission power (see col. 1 lines 8-13). Chen discloses setting the transmission power to a maximum value at a start of transmission (see col. 7 lines 45-59, col. 7 lines 1-67). Chen

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discloses gradually reducing the transmission power by a predetermined amount, each time when transmission succeeds a predetermined number of times (see col. 7 lines 50-55). Chen discloses in the case of a transmission failure at a transmission power which is gradually reduced by the predetermined amount, determining a power which is higher by the predetermined amount than the transmission power (see col. 7 lines 56-67 and col. 8 lines 1-67).

Chen does not specifically disclose an optimum value. Agrawal teaches an optimum value (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have as an optimum value, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claim 15, Chen discloses a method of automatically controlling a transmission power of a wireless communication apparatus in order to suppress the transmission power (see col. 1 lines 8-13). Chen discloses setting transmission power at a start of communication to a maximum value (see col. 7 lines 45-49). Chen discloses each time when transmission succeeds a predetermined number of times, gradually reducing the transmission power by a predetermined amount (see col. 7 lines 50-55). Chen discloses in the case where transmission at a transmission power which gradually reduced by the -predetermined amount fails, determining a power higher than the transmission power by the predetermined amount (see col. 7 lines 56-67, and col. 8 lines 1-67).

Chen does not specifically disclose an optimum transmit power, and after the optimum transmission power is set, maintaining the optimum transmission power unless any transmission

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failure. Agrawal teaches an optimum transmit power, and after the optimum transmission power is set, maintaining the optimum transmission power unless any transmission failure (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have an optimum transmit power, and after the optimum transmission power is set, maintaining the optimum transmission power unless any transmission failure, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claims 2, 9, and 18, the combination of Chen and Agrawal discloses a system that sets power to an optimal value. Chen however does not specially disclose at a similar radiated energy to the previous control step. Agrawal teaches similar radiated energy to the previous control step (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have a similar radiated energy to the previous control step, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claims 3 and 10, Chen does not specifically disclose once the optimum transmission power is set, the optimum transmission power is maintained unless any transmission failure occurs. Agrawal teaches once the optimum transmission power is set, the optimum transmission power is maintained unless any transmission failure occurs (see col. 5

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lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have the optimum transmission power is set, the optimum transmission power is maintained unless any transmission failure occurs, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claims 5, 6, 12, 13, 16, and 19, the combination of Chen and Agrawal discloses a transmission failure occurs after the optimum transmission power is set, transmission power is raised to the maximum value and resetting of optimum transmission power is carried out (see Chen col. 7 lines 45-67, col. 8 lines 1-35, col. 11 lines 5-67, and Agrawal col. col. 5 lines 1-67, col. 7 lines 1-50, col. 8 lines 7-67).

Consider claims 7, 14, and 20 Chen discloses setting a max power and incrementally decreasing (col. 7 lines 56-67 and col. 8 lines 1-67). Chen does not specifically disclose optimum transmission power. Agrawal teaches an optimum value (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have as an optimum value, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

3. Claim 4, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Agrawal as applied to claims 1, 8, and 15 above, and further in view of Hong et al. (6,298,241).

Consider claims 4, 11, and 17, Chen discloses the method and apparatus, as modified by Agrawal above, where Chen and Agrawal disclose finding the optimal power output. Chen and Agrawal further disclose non-interval or communications of frame intervals reaches a preset time period performed at a beginning highest power for finding optimum transmission is started (see Chen col. 7 lines 45-67, col. 8 lines 1-35, col. 11 lines 5-67, and Agrawal col. col. 5 lines 1-67, col. 7 lines 1-50, col. 8 lines 7-67). Chen and Agrawal do not specifically disclose a non-interval transmission time reaches a time threshold maximum jump based on the discontinued transmission during the time interval for determining the proper energy setting. Hong teaches a non-interval transmission time reaches a time threshold maximum jump based on the discontinued transmission during the time interval for determining the proper energy setting (see col. 4 lines 34-67, col. 5 lines 1-67, and col. 6 lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen and Agrawal, and have a non-interval transmission time reaches a time threshold maximum jump based on the discontinued transmission during the time interval for determining the proper energy setting, as taught by Hong, thus allowing adjustments to power in variable environments and more precise settings, as discussed by Agrawal (col. 2 lines 44-60 and col. 3 lines 1-20).

#### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(6,058,107), Love discloses power control based on accuracy of received frame.

5. Any inquiry concerning this communication should be directed to Nick Corsaro at telephone number (703) 306-5616.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 customer Service Office whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to read "Nick Corsaro", with a stylized flourish at the end.

Nick Corsaro

Primary Examiner